

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 0275M-644POA	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 02/ 24193	International filing date (day/month/year) 31/07/2002	(Earliest) Priority Date (day/month/year) 31/07/2001
Applicant EMHART LLC		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☒ because this figure better characterizes the invention.

11B _____

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/24193

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B60N3/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60N B62D B60R F16B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EP0-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 590 993 A (EMHART INC) 6 April 1994 (1994-04-06) abstract; figures 10,14 ---	1-12
A	DATABASE WPI Section PQ, Week 199910 Derwent Publications Ltd., London, GB; Class Q14, AN 1999-114313 XP002219372 & JP 10 338068 A (NISSAN MOTOR CO LTD), 22 December 1998 (1998-12-22) abstract; figure 4 ---	1-12
A	US 4 890 966 A (UMEZAWA TAKASHI) 2 January 1990 (1990-01-02) abstract; figure 2 ---	1,7
	-/--	



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

4 November 2002

Date of mailing of the international search report

26. 11. 2002

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 02/24193

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 35 17 620 A (USM CORP) 21 November 1985 (1985-11-21) abstract; figure 2B ---	1,7
A	US 4 828 444 A (OSHIDA TSUTOMU) 9 May 1989 (1989-05-09) abstract; figure 5 ---	1,7
A	DATABASE WPI Section PQ, Week 199622 Derwent Publications Ltd., London, GB; Class Q17, AN 1996-217970 XP002219373 & JP 08 082312 A (NIFCO INC), 26 March 1996 (1996-03-26) abstract; figure 1 -----	7

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 02/24193

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0590993	A	06-04-1994	EP 0590993 A1	06-04-1994
JP 10338068	A	22-12-1998	NONE	
US 4890966	A	02-01-1990	NONE	
DE 3517620	A	21-11-1985	DE 3517620 A1	21-11-1985
			DE 3540867 A1	19-06-1986
US 4828444	A	09-05-1989	DE 3728070 A1	03-03-1988
JP 8082312	A	26-03-1996	JP 2841281 B2	24-12-1998